What is claimed is:

1. An interleaving method for interleaving data signals, when conducting packet communication by using radio blocks, each of the radio blocks including a predetermined number of burst signals, each of the burst signals including data signals each having a predetermined number of bits, flag signals, and a synchronizing signal, the interleaving method comprising the steps of:

selecting, on a transmission side, a burst length of interleaving from among values that are multiples of the predetermined number and that are divisors of a total number of bits of data signals included in each of the radio blocks, and transmitting the burst length to a reception side;

conducting, on the transmission side, interleaving based on the burst length, and transmitting interleaved data to the reception side; and

conducting, on the reception side, deinterleaving on the interleaved data based on the burst length transmitted from the transmission side.

2. The interleaving method according to claim 1, wherein

if a total number of burst signals of radio blocks to be transmitted is a multiple of the predetermined number, and is not a divisor of a total number of bits of data signals included in each of radio blocks,

then the transmission side selects some values from among values that are multiples of the predetermined number and that are divisors of the total number of bits of data signals included in

each of radio blocks, so as to make a sum of the selected some values equal to the total number of burst signals of radio blocks to be transmitted, and

the transmission side conducts interleaving on respective portions of the radio blocks by using the selected some values.

3. The interleaving method according to claim 1, wherein a maximum value of the burst length is limited so as to make it possible to assign to every burst signal after interleaving, at least one bit among bits of burst signals before interleaving.

4. The interleaving method according to claim 1, wherein a maximum value of the burst length is limited so as to prevent a total number of bits of data signals required for interleaving from exceeding a communication buffer capacity.

5. The interleaving method according to claim 1, wherein a maximum value of the burst length is limited so as to prevent a transmission delay time between the transmission side and the reception side from exceeding an allowed time.

6. The interleaving method according to claim 1, wherein

the transmission side incorporates the burst length into control information to be transmitted to the reception side prior to transmission of interleaved data, and transmits the control information, and

the reception side deinterleaves the interleaved data based on the burst length incorporated in the control information.

7. The interleaving method according to claim 1, wherein

the transmission side determines the burst length from among values that are multiples of the predetermined number and that are divisors of the total number of bits of data signals included in each of radio blocks, based on an effect of reduction of burst errors.

8. The interleaving method according to claim 1, wherein the transmission side determines the burst length from among values that are multiples of the predetermined number and that are divisors of the total number of bits of data signals included in each of radio blocks, based on a kind of transmitted and received data.

9. The interleaving method according to claim 1, wherein the transmission side determines the burst length from among values that are multiples of the predetermined number and that are divisors of the total number of bits of data signals included in each of radio blocks, based on radio wave propagation characteristics in transmission and reception.

10. The interleaving method according to claim 1, wherein the predetermined number is four.

11. The interleaving method according to claim 1, wherein the total number of bits of data signals included in each of the radio blocks is 448.

12. The interleaving method according to claim 1, wherein

if the total number of bits of data signals included in each of the radio blocks is 448 + 4n (where n is a natural number),

then the transmission side adjusts the total number of bits of data signals included in each of the radio blocks by using

punctured coding so as to make the total number of bits of data signals included in each of the radio blocks equal to 448 before conducting interleaving, and

the transmission side conducts interleaving with the adjusted data signals.

13. The interleaving method according to claim 12, wherein the transmission side assigns the data signal of 4n bits that have not been interleaved by the adjustment to the flag signal, and

the transmission side incorporates the burst length into the data signal of 4n bits and transmits the interleaved data to the reception side.